



ARIZONA DEPARTMENT
OF HEALTH SERVICES

BIENNIAL REPORT 2017 - 2018

Bureau of Tobacco and Chronic Disease

Douglas A. Ducey | Governor

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azhealth.gov



ARIZONA DEPARTMENT OF HEALTH SERVICES

PREVENTION SERVICES

Dear Reader,

This Biennial Report has been prepared as a snapshot of what the Arizona Department of Health Services, Bureau of Tobacco & Chronic Disease has accomplished in 2017 and 2018 with the use of tobacco tax revenues provided through Propositions 200 and 303, and in consort with the Tobacco Revenue Utilization, Spending and Tracking (TRUST) Commission. As you will see, much has happened in those two years to address the use of tobacco in Arizona, as well as the four leading causes of disease-related death, including in rank order: cardiovascular disease, cancer, chronic lower respiratory disease, and Alzheimer's disease.

We are excited to report that cigarette use among Arizona youth is at an all-time low (7.1%, as reported in the 2017 Youth Risk Behavior Survey), which represents a decrease of approximately 30% since the last Biennial Report. However, the rise in use of e-cigarettes, commonly known as "vaping," has mirrored the national trends with over 50% of youth having vaped at least once, and a growing number of youth who vape daily. As such, ending the "vape epidemic," as coined by the Centers for Disease Control and Prevention and U.S. Surgeon General, has become our top priority, as evidenced in a major campaign ("*Facts Over Flavor*") we launched on December 31st, 2018. (*Note: As of this writing, the campaign, specifically designed to attract youth who are 9-13 years of age, has recorded an unprecedented number of Arizona youth accessing information through social media channels that counters the false assumptions of many youth and parents that vaping is harmless.*)

On the prevention side, Students Taking a New Direction (STAND), our award-winning statewide coalition of more than thirty-five youth advocacy groups has continued to engage local leaders and schools in every corner of the state in creating such critical initiatives as smoke-free parks, curbing illegal sales of tobacco to minors, and educating their peers on the health risks of nicotine addiction that is inherent in both tobacco and vape products.

While tobacco use among Arizona adults remains significantly below the national average, reported use trended upward in both 2017 and 2018. This is a concern, and is being addressed through major changes in our strategic efforts that include a deep reach into those populations that are most heavily impacted by tobacco use (e.g. Medicaid recipients, justice-involved people, and people living in geographical "hot spots").

Knowing that success is best achieved through a common mission, and that public health is "everybody's business," we continue to work alongside our many partners, including both state and federal agencies, local health departments, universities, and community-based organizations, and we are confident that further reductions in tobacco use among adults and youth, as well as vape use among youth, will be evidenced across all of Arizona's diverse populations.

We also know that a continued reduction of tobacco use will bear witness to a decline in disease morbidities and mortalities, and the financial burdens that accompany them. Thus, in our efforts to

help Arizonans prevent, detect, and manage the leading causes of death, our goals and actions have centered on those multi-agency collaborations afforded through the Arizona Health Improvement Plan (AZHIP), with the intended result that we are currently on track to achieve ambitious outcomes in reducing mortality rates by 2020. Most notably, at the mid-point of a five-year plan, cancer-related deaths have already been reported as well below our 2020 goal.

While we have achieved success across critical areas of public health, and Arizona has retained its position as among our nation's leaders in controlling tobacco use and chronic disease, our core concern remains: **Too many Arizonans still suffer needlessly and die prematurely as a result of tobacco use and chronic disease, both of which are preventable and easily managed when addressed with a strong sense of evidence and urgency!**

So, knowing that we can never take our foot off the accelerator, it is important to highlight a few exciting initiatives that are just getting underway:

- We are accelerating our efforts to halt the epidemic of vape use among youth;
- We are leveraging our partnerships with AHCCCS and the Department of Corrections to reach heavily-impacted populations;
- We are building on our successes and looking to innovative ways to reduce mortality tied to chronic disease; and,
- We are bringing support to the growing number of Arizonans struggling to care for their loved ones experiencing dementia!

Stay tuned and expect more!



A handwritten signature in black ink, appearing to read 'W. Tormala', with a long horizontal line extending from the end.

Wayne Tormala, Chief

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LINK BETWEEN TOBACCO AND THE LEADING CAUSES OF DEATH & DISEASE IN ARIZONA

Tobacco Use and Chronic Diseases

Tobacco use and secondhand smoke are closely tied to chronic diseases as shown in *Table 1*. The U.S. Department of Health and Human Services found that cigarette smoking is the leading preventable cause of death in the United States. CDC estimates show that smoking increases the risk of heart disease and stroke by two to four times. Male smokers are 25 times more likely to develop lung cancer, and female smokers are 25.7% more likely to develop lung cancer.¹ According to a national analysis conducted by the CDC, about 80% of all deaths from chronic obstructive pulmonary disease (COPD) are caused by smoking and tobacco use.¹

Table 1

Direct Relationships Between Modifiable Risk Factors and Chronic Diseases²

Modifiable Risk Factor	Heart Disease and Stroke	Respiratory Disease/ Asthma	Type 2 Diabetes	Cancer
Tobacco Use and Secondhand Exposure	○	○	○	○
Unhealthy Diet	○		○	○
Insufficient Physical Activity	○		○	○
Excessive Alcohol Use	○			○

LEADING CAUSES OF DEATH IN ARIZONA

In FY17 and FY18, a portion of the tobacco tax revenues through Proposition 200 and 303 directly supported work to combat three* of the top four leading causes of disease-related death in Arizona, which are, in order of burden:

1. Heart disease*
2. Cancer³
3. Chronic lower respiratory disease*
4. Alzheimer's disease*

The next sections provide data surrounding heart disease, chronic lower respiratory disease, and Alzheimer's; associated goals within the Arizona Health Improvement Plan; and current programming efforts and initiatives.

¹ U.S. Department of Health and Human Services. *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014 [accessed 2017 Apr 20]. ² Adapted from the *Epidemic of Chronic Disease in Wisconsin: Why it matters to the economy and what you can do to help* (Wisconsin DHS, 2010). ³ Cancer programming at ADHS receives federal funding from the Centers for Disease Control and Prevention and through a State line item, which is not derived from tobacco tax revenues. Therefore, extensive cancer data is not described in this report. Other disease-related causes of death not included in this document may also be funded by outside federal revenues. For more information and data on cancer and other diseases, please visit the Bureau of Tobacco & Chronic Disease online. (hyperlink "online" to <https://www.azdhs.gov/prevention/tobacco-chronic-disease/index.php>)

SNAPSHOT OF YOUTH TOBACCO USE IN ARIZONA

Tobacco Use

- According to the Arizona Youth Risk Behavior Survey (YRBS), current cigarette use by high school youth has dropped 68% in the past 10 years.
- Quit attempts among high school students during the 12 months before the survey decreased from 49% in 2015 to 45% in 2017.
- In 2017, the Arizona YRBS introduced questions on current use of smokeless tobacco (i.e., chewing tobacco, snuff, dip, snus, or dissolvable tobacco products). Approximately 5% of high school youth reported using smokeless tobacco on one day during the thirty days before the survey.
- Cigar use—on at least one day during the thirty days before the survey—among high school youth decreased in 2017 when compared to 2015, from 10.1% to 5.5%.

Electronic Vapor Products

- In 2015, questions about the use of electronic vapor products (i.e., e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens) were added to the Arizona YRBS.
- Approximately half of the high school youth reported having ever used an electronic vapor product in 2017, with the estimate remaining steady when compared to 2015.
- Frequent use of electronic vapor products among high school youth increased in 2017 (5.3%) compared to 2015 (3.1%).
- From 2015 to 2017, high school youth reporting daily use of electronic vapor products, on all 30 days during the 30 days before the survey, nearly doubled (1.6% to 3.7%, respectively).





YOUTH PROGRAMS AND SERVICES

Students Taking a New Direction (STAND) is Arizona's statewide anti-tobacco youth coalition. There are more than 35 active local youth coalitions working throughout the state representing urban, rural, and tribal communities. There are youth activities in all 15 counties. STAND coalitions are known and respected on a national stage, and are recognized by the Centers for Disease Control and Prevention (CDC) as a Best Practice for Youth Engagement.

In each of the past two years, more than 400 STAND youth members have dedicated themselves to conducting cross-age peer education and community awareness campaigns, and pursuing policy action plans focused on:

1. Reducing teen access to tobacco products
2. Reducing exposure to secondhand smoke

In Arizona, the average age of smoking initiation is 12 years old. STAND cross-age peer education has therefore begun to focus on developing relationships with 5th and 6th grade students with the objective of inspiring the first tobacco-free graduating class.

Coalition Highlights

STAND coalitions continue to have success supporting improvements in health policies at the local level. For example, the Cochise County Youth Health Coalition planned and conducted a non-partisan mayoral forum, which was attended by all three mayoral candidates. The Cochise County Youth Health Coalition also worked with their city council to successfully pass an ordinance increasing the legal age to purchase tobacco products to 21 years old in Cochise County. After seven years of consistent, dedicated work with the Flagstaff City Council,



two coalitions (Coconino Anti-Tobacco Students and Arizona Students Aiming for Prevention) accomplished their pursuit of an ordinance prohibiting smoking in all Flagstaff city parks and cemeteries. Restrictions on tobacco use in parks have also been passed in Navajo County (Elevate), Graham County (STARS), and Pima County (Anza Trail SWAT). Two tribal STAND Coalitions – one sponsored by the Hopi Nation and one sponsored through the Southwest Navajo Tobacco Education and Prevention Program – are working diligently to remove commercial tobacco from spiritual ceremonies and gatherings. The Empire SWAT group has launched a school administration-approved diversion class for high school students found in possession of tobacco products and paraphernalia, including e-cigarettes.

Several STAND youth have been selected to serve as national tobacco control youth advocates and to attend national leadership events conducted by the Campaign for Tobacco-Free Kids and by Truth Initiative. Also, STAND youth coalitions were represented at the FY2017 Truth Campaign's Leadership Institute, including Cochise County Youth Health Coalition (Cochise County), Yavapai Anti-Tobacco Coalition of Youth (Yavapai County), and Trevor G. Browne SWAT (Maricopa County).

Semi-annual regional training workshops and STAND's annual summer conference provide opportunities for STAND coalition youth to increase their knowledge and sharpen their skills related to community assessment, issue advocacy, public speaking, legislative processes, and tobacco marketing tactics. Recent national speakers have included: Vincent Irving (Truth Initiative), Reggie Cajayon (Campaign for Tobacco-Free Kids, Youth Engagement Alliance), Andrea Quijada (media literacy consultant), and Suzanne Nash (Indigenous Peoples Task Force). Students Taking a New Direction (STAND) has become a national model for other youth-empowered anti-tobacco coalitions.

Statewide Enforcement of Sales to Minors

Enforcement of illegal sale of tobacco products to minors is a vital component of a comprehensive tobacco prevention program. Laws prohibiting these sales are ineffective at reducing tobacco use among children when they are not paired with an effective enforcement program.

There Are Currently Two Dedicated Youth Tobacco Inspection Programs Operating in Arizona:

- The United States Food & Drug Administration (FDA) contracts with ADHS to operate the FDA Compliance Inspection Program (FDA Program).
- ADHS contracts with the Attorney General's Office (AGO) to operate the AGO's Counter Strike Youth Tobacco Program (AGO Program).

While the FDA Program enforces the *federal* ban on sales to minors, the AGO Program enforces the *state* ban on sales to minors. Since the fall of 2014, the AGO and FDA Programs have been conducting regular joint inspections and leveraging extensive collaboration and resource sharing. As a result of this joint enforcement model, compliance rates have significantly improved since 2014. State enforcement also provides opportunities for retailer education. While both programs hold retailers accountable for violations, the federal program includes potential penalties of up to \$11,000+ and imposes No Tobacco Sale Orders (NTSO) for repeat violators. It's important to note that no retailers in Arizona have reached that level of violation. One significant tool that assists in the collaborative project is the Tobacco Enforcement System, which also provides a public source of tobacco retailer compliance data⁴.

In FY2018, the AGO Program had the lowest fail rate since the program began in 2002 at 9.8%, meeting a significant benchmark of over 90% compliance.

Enforcement of illegal sale of tobacco products to minors is a vital component of a comprehensive tobacco prevention program.



⁴ <https://mapping.countertools.org/aztes>



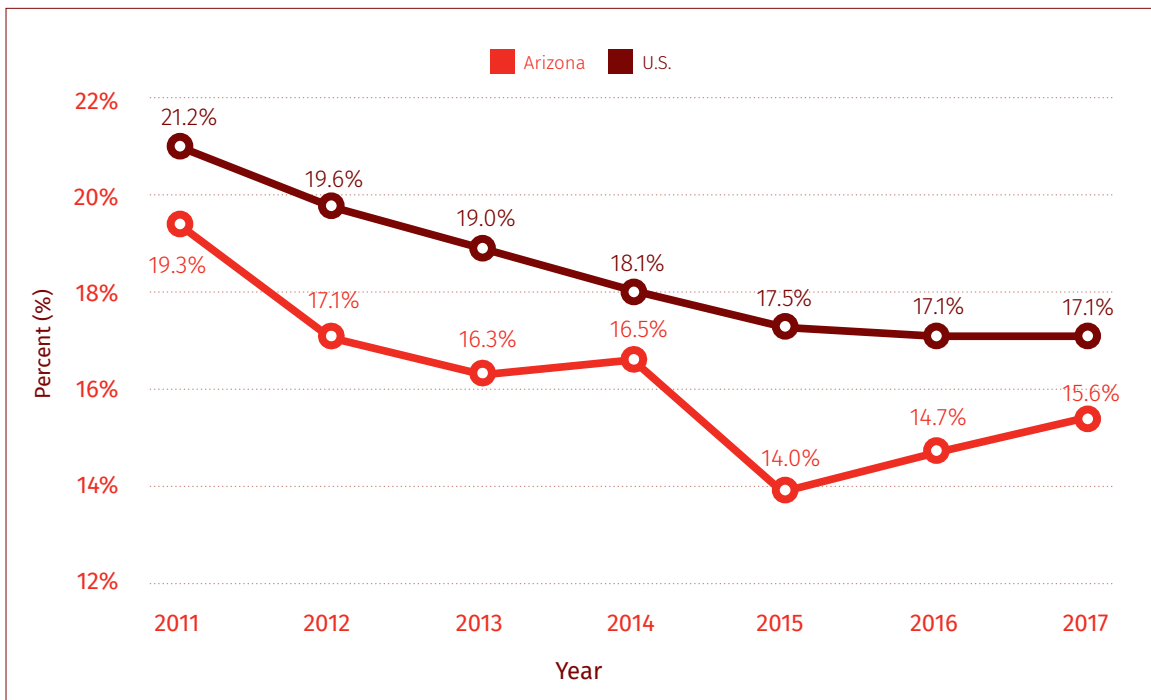
ADULT PROGRAMS, ACTIVITIES, AND SERVICES

Snapshot of Adult Tobacco Use in Arizona

There are an estimated 740,000 adult smokers in Arizona. Current smoking among adults has steadily increased from 2015 to 2017, yet has remained consistently below national estimates during this time period. When comparing U.S. and Arizona adults who are current, former, or never smokers, prevalence in these categories for Arizona mirrored national estimates. In 2018, based on reported state prevalence of current smoking, Arizona was ranked 16th nationally on America's Health Rankings scorecard.

Figure 1

Current Tobacco Use Among Adults, 2011-2017 BRFSS



In Arizona, middle age adults (between the ages 45 and 64) had the highest percentage of current smokers.

SNAPSHOT OF ADULT TOBACCO USE IN ARIZONA

Demographics

Figure 3 illustrates the percentage of current smokers in Arizona by age group. Middle age adults (between the ages of 45 and 64) had the highest percentage of current smokers by age group, 18.4% and 19.3% respectively. Whereas, adults in the 65 years or older age group had the lowest reported percentage of current smokers at 10.0%.

Figure 4 shows the percentage of current smokers in Arizona by race/ethnicity. Arizona adults identifying as Other Race, non-Hispanic had the highest prevalence of current smoking at 21.6%. Additionally, Black, non-Hispanic and White, non-Hispanic were close behind with smoking prevalence of 17.8%.

Figure 2

Comparison of Arizona and U.S. Adults Who are Current, Former, and Never Smokers, 2017 BRFSS

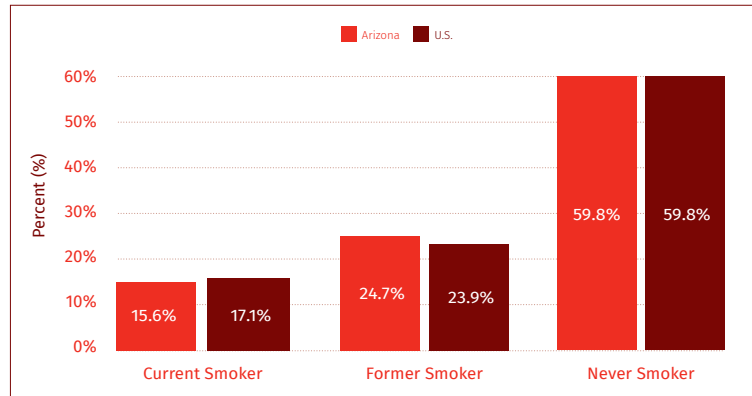


Figure 3

Percentage of Arizona Adults Who are Current Smokers by Age Group, 2017 BRFSS

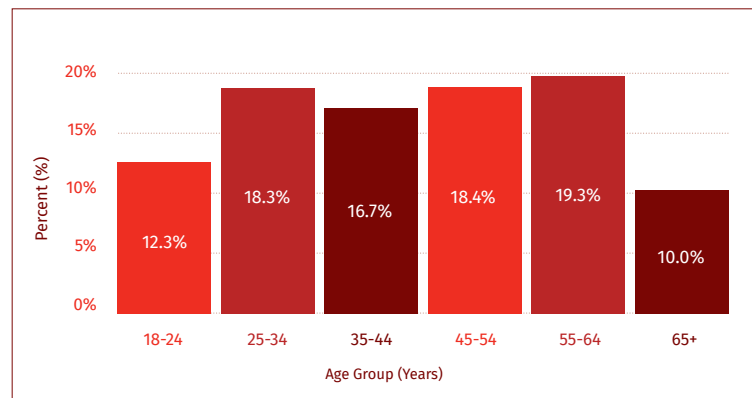
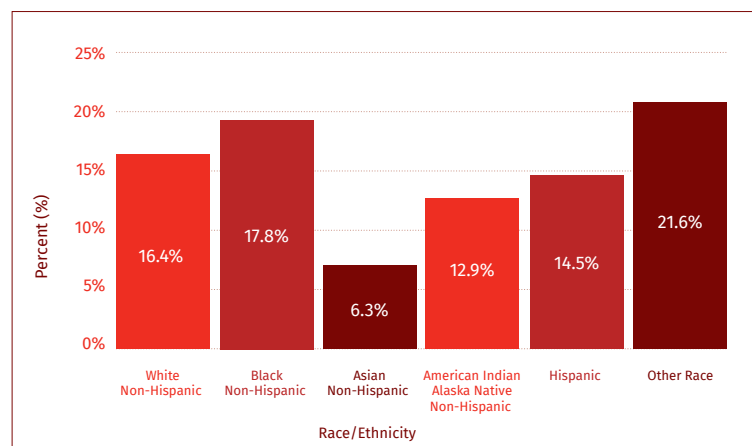


Figure 4

Percentage of Arizona Adults Who are Current Smokers by Race/Ethnicity, 2017 BRFSS





ASHLINE

In FY17 and FY18, ASHLine received a little over 47,000 calls from tobacco users across the state. ASHLine also worked with healthcare providers and community partners to promote health systems change by training and assisting providers to connect tobacco users with the quitline. Across the two fiscal years, ASHLine delivered 210 trainings to over 2,000 providers resulting in 19,315 referrals to the quitline. These efforts contributed to ASHLine enrolling over 20,000 tobacco users into services. ASHLine's average a quit rate was 36% during these years. Our Public-Private Partnerships (PPP) team continued to build strategic partnerships with employers, insurance companies, and insurance brokers to provide their members with high-quality cessation services. This year, ASHLine successfully established two new contracts with employers, including an Arizona county.

Table 2

FY18 ASHLine Performance Indicators

Indicator	Result
Tobacco cessation trainings (statewide)	210
Number of healthcare providers trained	2,338
Number of referrals to the ASHLine	19,351
Number of calls to the ASHLine	47,449
Number of enrollments	20,221
Percent of clients receiving at least 1 coaching call	80%
Percent of clients who reported using cessation medication	70%
Overall statewide quit rate	36%

ARIZONA CENTER FOR TOBACCO CESSATION

In the fall of 2018, the Arizona Department of Health Services Bureau of Tobacco and Chronic Disease, in partnership with the University of Arizona's Mel & Enid Zuckerman College of Public Health, established the Arizona Center for Tobacco Cessation at the University of Arizona, Phoenix. The primary objective of the Center will be to reduce tobacco prevalence among adults in Arizona to single digits in the next five years.

To achieve success, the Center will leverage national best practices in tobacco cessation to develop a comprehensive vision to increase quit attempts and successful quits that is guided by the four common pathways individuals use to quit:

1. Receiving help from healthcare professionals
2. Using cessation services provided by an employer, insurer, or healthcare provider
3. Making quit attempts motivated and supported by interactions with trusted messengers (e.g., friends and family)
4. Quitting cold turkey

The Arizona Center for Tobacco Cessation will also establish a Tobacco Cessation Training Institute to provide statewide cessation education, intervention, and referral training to healthcare providers, public health professionals, community health workers, and the community at-large. Creating training capacity that has statewide coverage ensures that regardless of need or location, Center staff will be able to provide training that is clear, consistent, and connected.

The primary objective of the Center will be to reduce tobacco prevalence among adults in Arizona to single digits in the next five years.



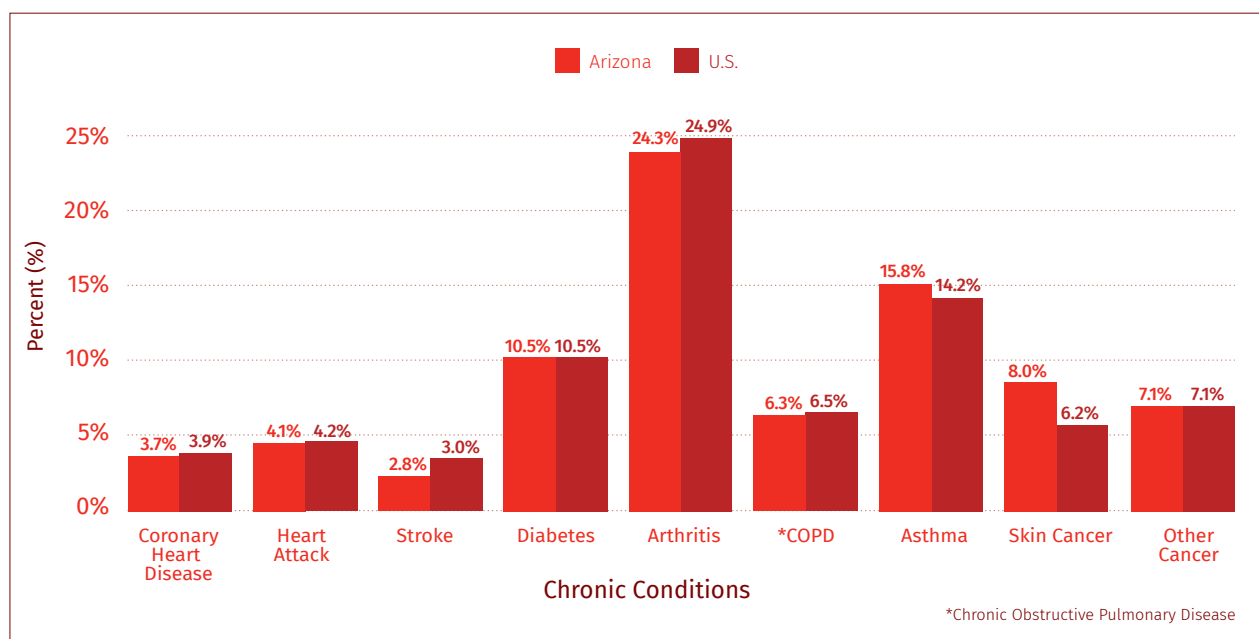
REDUCING THE BURDEN OF CHRONIC DISEASES

Six in ten Americans live with at least one of the chronic conditions listed in *Figure 5*. These and other chronic conditions are the leading cause of death and disability in America and the leading drivers of healthcare cost⁵. In Arizona, the leading cause of death is heart disease followed by cancer. In 2016, 11,820 deaths were linked to heart disease, and 11,801 were related to cancer⁶. Unintentional accidents, chronic lower respiratory infections, and Alzheimer's disease made up the top five leading causes of death in 2016 for Arizona. The prevalence of chronic conditions such as heart disease, stroke, diabetes, and COPD are determined using data from the Behavioral Risk Factor Surveillance System (BRFSS).

In 2017, Arizona had a higher percentage of adults reporting asthma and skin cancer as compared to the national rate (*Figure 5*). The percentage of Arizona adults reporting other chronic conditions was either similar or slightly higher than the national rate (*Figure 5*).

Figure 5

Percentage of Adults That Have Been Told They Have a Chronic Condition, BRFSS 2017



⁵ CDC National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP): <https://www.cdc.gov/chronicdisease/about/index.htm>

⁶ Arizona Public Health Vital Statistics, 2016 ⁴ CDC Behavioral Risk Factor Surveillance System: <https://www.cdc.gov/brfss/index.html>

CHRONIC DISEASE SELF-MANAGEMENT EDUCATION PROGRAMS

Addressing chronic disease conditions requires strategies to delay the health-related effects of aging, improve function, and discuss the problems that people confront in their day-to-day lives. Through a partnership with the U.S. Administration of Community Living, ADHS BTCD has promoted the Stanford model through community-based workshops. In Arizona, the Stanford model is called the Healthy Living Program. The Healthy Living Program is a low-cost program that helps individuals with chronic conditions learn how to manage and improve their own health while reducing health care costs. The program consists of workshops once a week for two and a half hours over six weeks in community-based settings, such as: senior centers, congregate meal programs, faith-based organizations, libraries, YMCA's, YWCA's, and senior housing programs. In addition to hypertension and Chronic Pain Self-Management Programs, Arizona offers Spanish-speaking programs (Tomando Control de Su Salud and Program de Manejo Personal de la Diabetes). Led by a pair of trained facilitators, one or both of whom have a chronic condition themselves; participants focus on building the skills they need to manage their conditions by sharing experiences and providing mutual support. The Living Well programs continue to be hosted by multiple County Health Departments throughout Arizona.

HEALTH IN ARIZONA POLICY INITIATIVE (HAPI)

In January 2012, ADHS created the Health in Arizona Policy Initiative (HAPI) to achieve the goals of coordinated chronic disease efforts, including (in rank order) heart disease, cancer, CLRD, Alzheimer's and dementia. HAPI is a collaborative effort that leverages tobacco tax, lottery funds and federal dollars to address social determinants of health through a "health in all policies" approach within worksites, communities, schools and health systems. HAPI is built upon the leveraging of resources, development of relationships, and engagement of all populations on advancing efforts which make the healthy choices easy for communities. Across Arizona, the 14 participating counties have selected HAPI strategies based on the needs, gaps, and barriers identified in their County Health Assessments.



HEALTHY ARIZONA WORKSITES PROGRAM (HAWP)

Comprehensive worksite wellness programs are proven to help organizations control healthcare costs, including those associated with chronic conditions such as heart disease, diabetes, and pulmonary disease, and they also increase productivity among employees. Many employers have

Table 3**HAPI Strategy Areas Selected Based On County Health Assessment Data**

Strategy Area	Description	Number of Counties (out of 14 participating Counties)
Chronic Disease	Using community-based strategies to decrease deaths from the heart disease, cancer, dementia and chronic lower respiratory disease in Arizona.	14
Children and Youth with Special Healthcare Needs	Increasing representation of children and youth with special healthcare needs in policy, assessment and community planning work.	11
Healthy Community Design	Informing healthy community design and access to bike lanes, gardens, and affordable healthy food.	10
School Health	Working with schools to improve nutrition and physical activity, while decreasing screen-time for Arizona students.	10
Worksite Wellness	Create healthier worksites by supporting Arizona workplaces in selecting and using evidence-based wellness strategies.	9
Procurement	Increasing the procurement of healthy vending options, nutritious foods and drinks.	2
Clinical Care	Improving clinical outcomes through policy, system, and health literacy work.	4

Source: Year 4 Healthy People Healthy Communities Action Plans

little understanding of how to implement a worksite wellness program that connects public health prevention efforts with health plan benefit design and utilization.

The Healthy Arizona Worksites Program (HAWP) provides tools, resources and technical assistance to employers throughout Arizona to design, implement, and evaluate healthy worksite initiatives. HAWP also works to create linkages between Arizona worksites engaging in healthy worksite efforts so that worksites can share lessons learned with each other. The HAWP has developed many strong partnerships with partners such as the City of Phoenix/FitPhx Program, Mesa Chamber of Commerce, Greater Phoenix Chamber of Commerce, Employer's Health Alliance in Pima County, Yuma Regional Medical Center, and Northern Arizona Public Employees Benefit Trust. The HAWP offers HAWP 101 worksite wellness training statewide, and these partners host regular training that has helped to scale the program and broaden its reach.



MILLION HEARTS INITIATIVE

The Bureau of Tobacco and Chronic Disease provided funding to Arizona counties to support The Million Hearts Initiative in their communities. This initiative includes Ama Tu Corazon, a bi-national campaign to promote heart health. This campaign originated in California and was implemented with support from Arizona's Office of Border Health and border county health departments.

CHRONIC LOWER RESPIRATORY DISEASE

Chronic Lower Respiratory Disease (CLRD) is an umbrella term used to describe a group of diseases affecting the lungs which include chronic bronchitis, emphysema, Chronic Obstructive Pulmonary Disease (COPD), and asthma. It is estimated that 50% of lung disorders go undiagnosed, and therefore untreated. CLRD is the 3rd leading cause of death in Arizona, behind cancer and heart disease (2016). In 2017, the age-adjusted mortality rate for CLRD was 43.1 per 100,000 individuals. This translates to 3,788 deaths in 2017 due to CLRD. A ten percent (10%) reduction in CLRD mortality would result in saving 307 Arizona lives in 2020. In 2017, 15.8% of Arizona adults were told by their doctor that they had asthma, and 6.3% were told they had COPD. Factors that contribute to effective management of CLRD include proper diagnosis by a health care professional, implementation of individualized self-management plans, and access to healthcare. The Arizona Health Improvement Plan (AzHIP) initiative includes CLRD and asthma as one of the fourteen health areas prioritized. The goal of the CLRD/Asthma AzHIP workgroup is to reduce the mortality rate for CLRD by 10% by 2020. Although we have seen a decrease in mortality rates from 2015 (45.1 per 100,000 population) to 2017, Arizona continues to have an asthma prevalence rate for adults that is slightly higher than the national rate of 14.2% (*Figure 6*). In comparison, the COPD prevalence rate for adults in Arizona decreased from 6.8% in 2016 to 6.3% in 2017 (*Figure 7*). On a local and state level, the impact of CLRD and its group of diseases can be lessened through the implementation of clean air policies, increasing resources and support for home and school-based interventions, disease management programs, and professional development of healthcare professionals.

The goal of the CLRD/Asthma AzHIP is to reduce the mortality rate for CLRD by 10% by 2020.

Figure 6

Adults Ever Told They Have Asthma, BRFSS 2011-2017

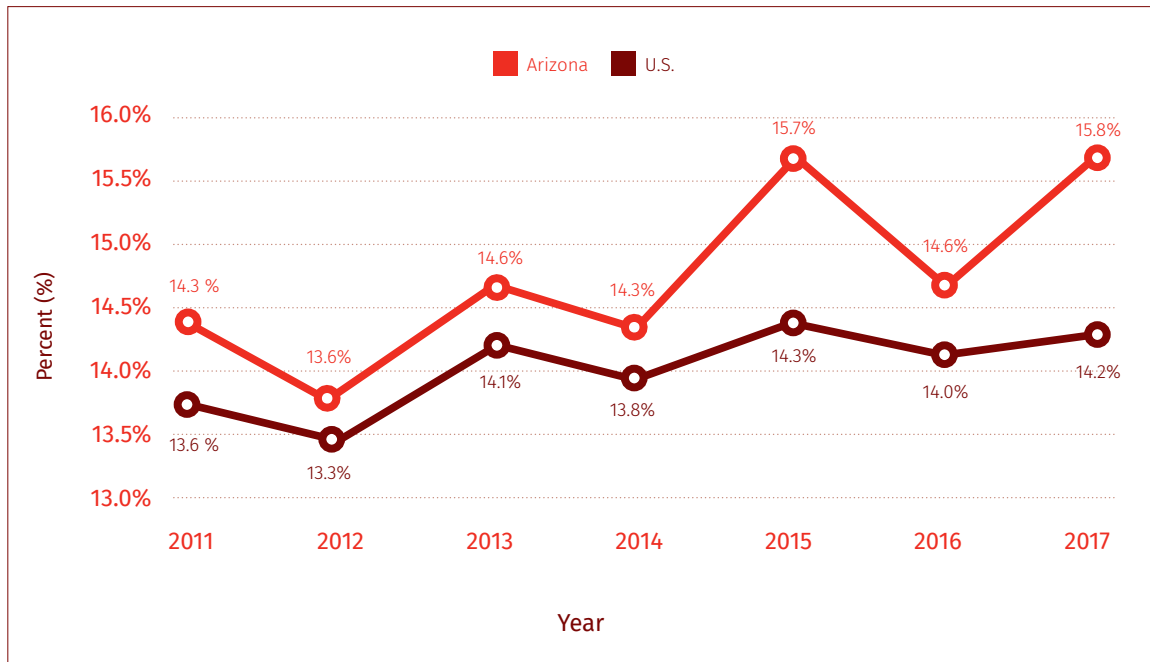
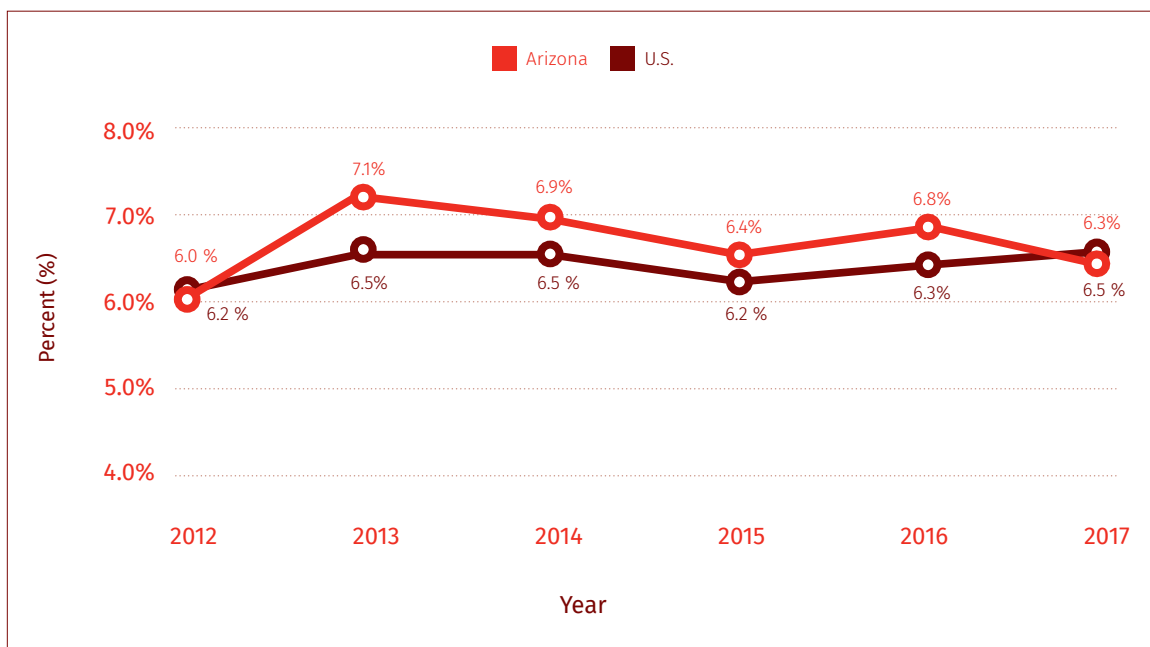


Figure 7

Adults Ever Told They Have Chronic Obstructive Pulmonary Disease, BRFSS 2011-2017





Through Our Partnership With The American Lung Association In Arizona (ALA), The Following Activities Were Implemented:

- The development of the BreatheEasyAZ.org website, monthly newsletter, and social media page that provided CLRD information to the public;
- The development of a Chronic Obstructive Pulmonary Disease (COPD) Awareness Toolkit that went to over 250 statewide key partners;
- The development of resources and tools to support coaches and facilitators in the Better Breather's Clubs and Freedom From Smoking groups;
- A piloted project that supported a collaborative approach to implementing systems that support and sustain adherence to an evidence-based program that utilizes asthma guidelines.

ALZHEIMER'S DISEASE

In Arizona, over 140,000 citizens aged 65 or older have been diagnosed with Alzheimer's, and that number is expected to grow to 200,000 by 2025⁷. Currently, Alzheimer's is the fourth leading disease-related cause of death among those 65 and older in the state⁸. The increased prevalence of Alzheimer's brings with it the increased demand for caretakers and dementia support resources. In 2017, there were approximately 330,000 dementia caregivers in Arizona; of these caregivers, a total of 376 million hours of work went unpaid⁹. Additionally, 83% of caregivers (i.e., adult children, spouses, and other family members) helping family members with dementia, went unpaid¹⁰. Caregivers are often impacted by additional stressors beyond that of caretaking. They experience their own co-morbidities, social isolation, and financial burdens. They face the vulnerability of lost wages, unemployment and/or falling deeper into poverty through increased economic concerns. For example, many caregivers report having to take time off work, having difficulty with transportation, and experiencing strain from additional medical and housing costs. According to a recent AARP survey of caregivers in Maricopa County, 56% of caregivers are over the age of 50 and almost all caregivers are managing the Instrumental Activities of Daily Living (IADL) for people with dementia. Each year, the need to better support dementia caregivers in Maricopa County increases as both dementia and Alzheimer's diagnoses increase. The Arizona Department of Health Services, Bureau of Tobacco and Chronic Disease in partnership with Virginia G. Piper Charitable Trust, Vitalyst Health Foundation, and Maricopa County Department of Public Health (referred to as the "Funder's Team") partnered to better understand how they could identify and fill major gaps as they maximized their collective reach to provide support to all Arizonans who are caregivers for people with dementia.

⁷ <https://pub.azdhs.gov/health-stats/report/aging/aia-report.pdf> ⁸ Arizona Department of Health Services "Aging in Arizona" p. 28

⁹ https://www.alz.org/media/dsw/ALZ_F_StateSheetsBBSY_Arizona.pdf ¹⁰ <https://www.alz.org/alzheimers-dementia/facts-figures>

In fall of 2016, a Social Network Analysis was conducted by The School of Public Affairs at the University of Colorado at Denver, of the existing Alzheimer's caregiver providers in Maricopa County. This showed the services being provided, gaps in services, various points of entry for service, types of interactions, resources, information exchanged and quality and content of relationships.

Initially, the Arizona Dementia Caregivers Alliance (ADCA), made up of 13 dementia service providers, has grown to 27 community partners representing a public and private collaborative. The ADCA first met formally as a group in late 2016 and made significant progress toward building a system of support for caregivers of dementia. It created a mission, reviewed the social network analysis of care, and developed a service inventory that included a list of caregiver support programs. The ADCA also chose the Arizona Department of Health Services, Bureau of Tobacco and Chronic Disease to act as the convening partner. A professional facilitator was hired to keep the group moving forward and to make sure all voices were represented in the discussions. The following mission statement was developed: An alliance of support organizations improving access to comprehensive services for caregivers of people with dementia.

In November 2017, the ACDA partnered with the advancing community resilience partnership (ACRP), a partnership between Virginia G. Piper Charitable Trust (Piper Trust) and the Institute for Sustainable Communities (ISC) that works alongside public agencies, private and social profit organizations, and individuals – tapping the strengths of existing relationships and fostering new collaborations to collectively address pressing issues and needs, and ultimately, helping build Maricopa County's community resilience. The ADCA asked ACRP to build on their existing efforts by utilizing the community resilience lens to conduct the following:

- Transform the service inventory into a product that network members can easily navigate, use, and reference.
- Conduct a business-process mapping exercise, from the perspective of the caregiver, to define the current system of caregiver support and the opportunities for enhancement.

APPENDIX A

Data Resources

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual population-based telephone survey administered by the Centers for Disease Control and Prevention (CDC) and conducted by state, territorial or tribal government departments of health. The survey is conducted nationally as well as in the District of Columbia and in three United States (U.S.) territories. Individuals selected to participate in the survey include non-institutionalized adults, aged 18 years and older. The survey collects data about their health-related risk behaviors, chronic health conditions, healthcare access, and use of preventive services. Additional information about BRFSS survey design, sampling methods, data collection, and survey weights is available at: <https://www.cdc.gov/brfss/index.html>.

YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM (YRBSS)

The Youth Risk Behavior Surveillance System (YRBSS) is a biennial school-based survey administered by the Centers for Disease Control and Prevention (CDC) and conducted by state, territorial or tribal government departments of health and education. The survey sample includes 9th through 12th grade students enrolled in public and private schools. The data collected is used to monitor six priority health behaviors that contribute to the leading causes of morbidity and mortality, disability, and social problems among youth and young adults in the United States. The YRBSS was designed to enable public health professionals, educators, policy makers, and researchers to:

1. Determine the prevalence of health behaviors among youth
2. Assess trends in health behaviors over time
3. Monitor progress toward achieving objectives or program indicators

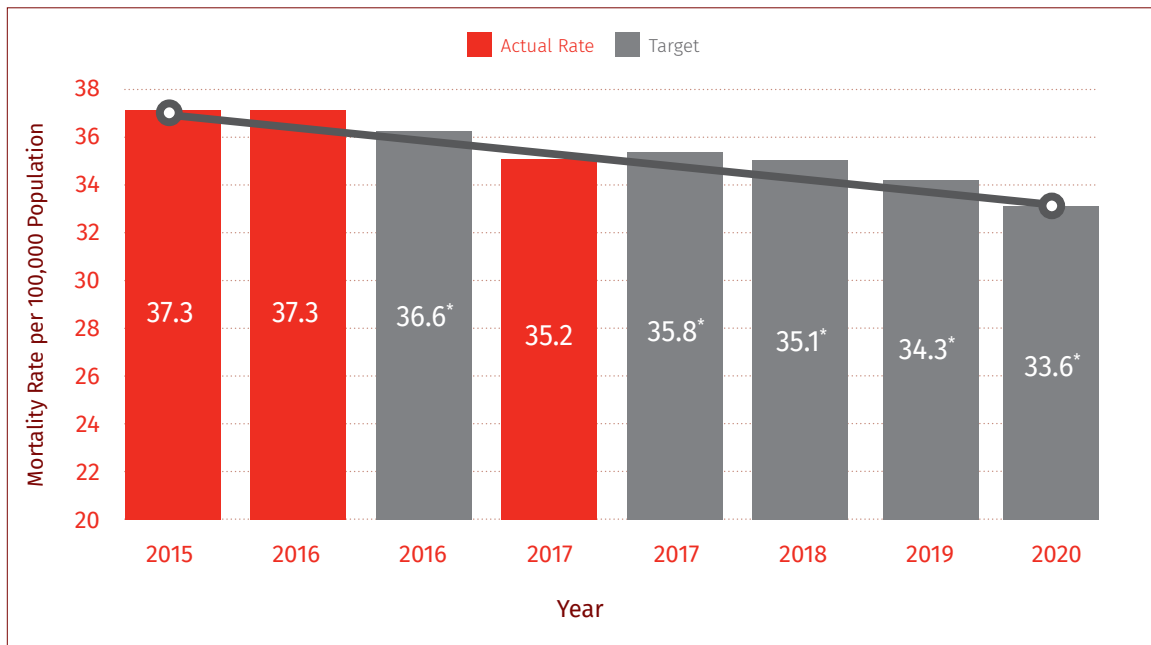
Additional information about the YRBSS survey design, sampling methods, and data collection is available at: www.cdc.gov/healthyyouth/data/yrbs/index.htm.

APPENDIX B

Mortality Trend Graph - Alzheimer's Disease

Figure 8

Alzheimer's Disease Age-Adjusted Mortality Rates (2015-2020)



*The mortality rate target was based on a 10% decrease in 2020 from the 2015 rate Source: Arizona Vital Records, 2015, 2016 & 2017

APPENDIX B

Mortality Trend Graphs - Heart Disease and Cancer

Figure 9

Heart Disease Age-Adjusted Mortality Rates (2015-2020)

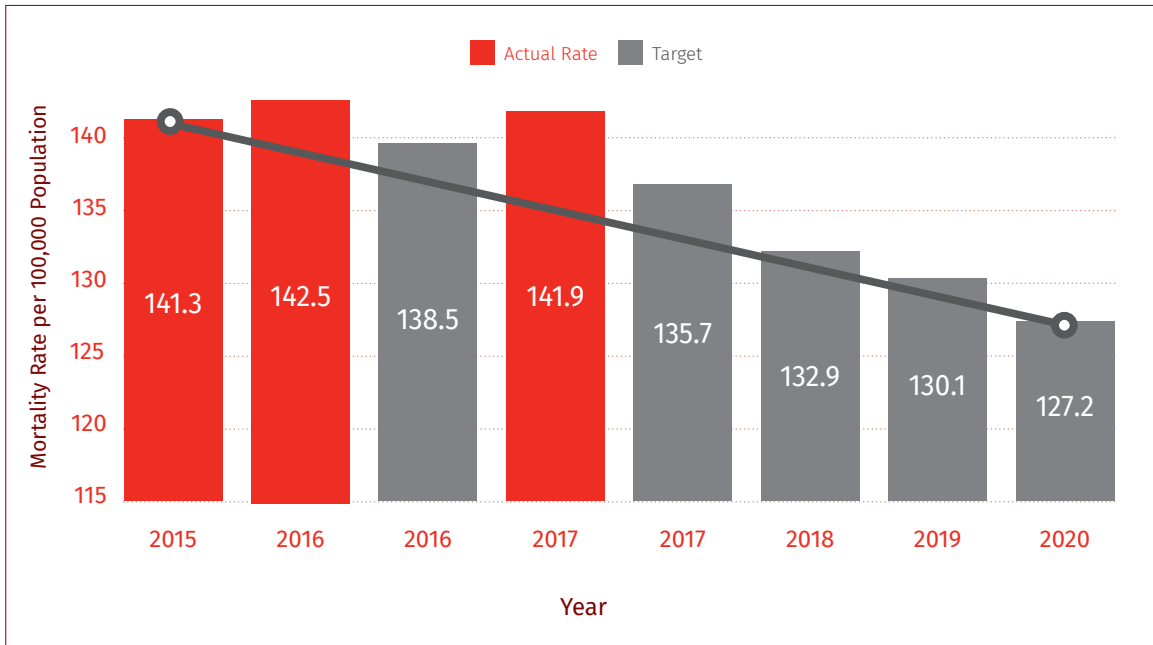
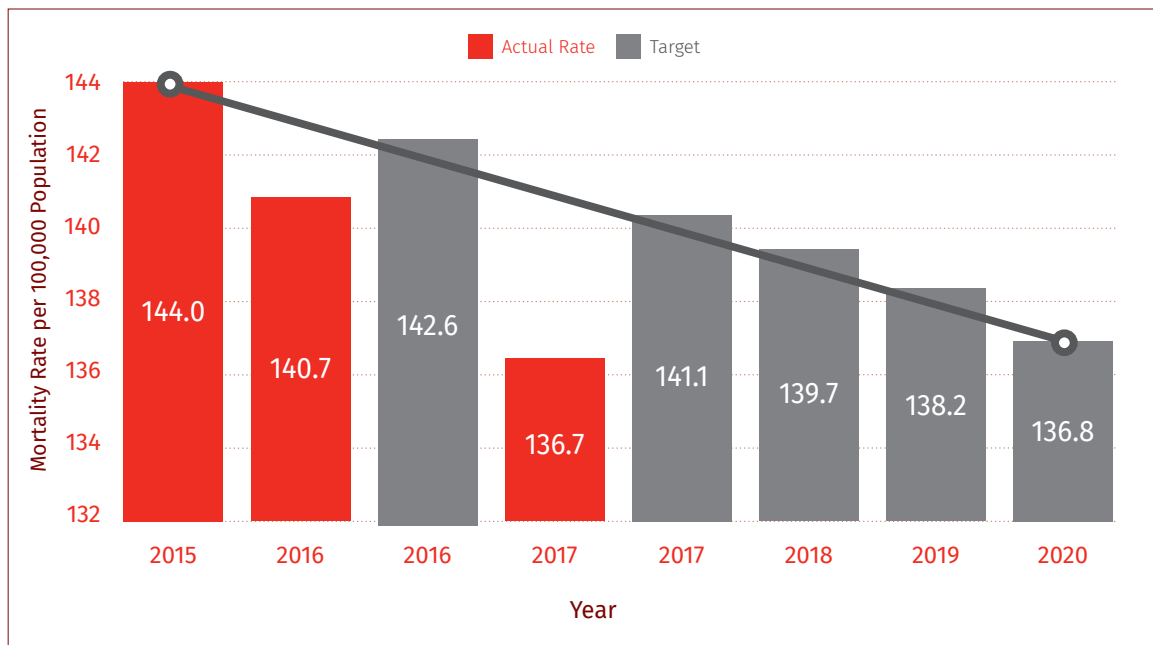


Figure 10

Cancer Age-Adjusted Mortality Rates (2015-2020)



The mortality rate target was based on a 10% decrease in 2020 from the 2015 rate.

Source: Arizona Vital Records, 2015, 2016 & 2017

APPENDIX C

Finances

Table 4

PROP 303 Expenditures and Contracts FY17-FY18

Projects	Expenditures	
	Fiscal Year 2017	Fiscal Year 2018
Administration	302,116	274,479
Community Outreach	14,791	(211)
Evaluation	43,445	11,009
Health in Arizona Policy Initiatives	1,175,214	784,966
Local Projects	101,642	56,899
Marketing and Communication	31,917	78,623
Statewide Projects	650,670	507,671

Table 5

PROP 200 Expenditures and Contracts for FY17-FY18

Projects	Expenditures	
	Fiscal Year 2017	Fiscal Year 2018
Administration	856,890	686,149
Community Outreach	236,008	246,857
Evaluation	163,082	30,366
Licensing – Empower	236,930	242,561
Local Projects	6,522,599	5,506,435
Marketing and Communication	5,386,661	5,509,414
Native American Outreach	140,312	315,252
Statewide Projects	3,904,819	4,806,107

APPENDIX D

Bureau Resources

Bureau of Tobacco & Chronic Disease Offices & Programs

150 North 18th Avenue, Suite 310
Phoenix, Arizona 85007
602.364.0824

Office of Tobacco Prevention & Cessation

Website: <https://azdhs.gov/prevention/tobacco-chronic-disease/tobacco-free-az>

- Arizona Smokers' Helpline (ASHLINE)
- Students Taking a New Direction (STAND)
- U.S. Food and Drug Administration (FDA) Tobacco Compliance Program
- Tobacco, Revenue, Use, Spending and Tracking Commission (TRUST Commission)

Office of Chronic Disease

Website: <https://azdhs.gov/prevention/tobacco-chronic-disease>

- Diabetes Prevention and Control Program
- Arizona Diabetes Coalition
- Community Health Worker Program
- Arizona Heart Disease & Stroke Prevention Program
- Arizona Healthy Aging Program

Office of Cancer Prevention and Control

Website: <https://azdhs.gov/prevention/tobacco-chronic-disease/cancer-prevention-control>

- Well Woman HealthCheck Program
- Breast and Cervical Cancer Treatment Program
- Close the Gap
- Arizona Cancer Coalition

Office of Population Health

Website: <https://azdhs.gov/prevention/tobacco-chronic-disease/health-disparities>

- Refugee Health Program
- Language Access—Interpretation and Translation Assistance
- National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Health and Health Care